

WHAT IS CLAIMED IS:

- 1 1. A water distribution system for wetting an evaporative media pad
2 having an air inlet side, an opposing air outlet side, a pair of sides
3 extending between the air inlet side and air outlet side, and a top,
4 the system comprising:
5 a nozzle configured to spray a stream of water upwardly;
6 a water distributor located above the top of the media pad
7 having a substantially horizontal receiving surface configured to split the
8 stream of water into a first portion directed toward the air inlet side and a
9 second portion directed away from the air inlet side.
- 1 2. The system of claim 1, wherein the receiving surface extends from
2 a point of contact a sufficient distance to allow the first and second
3 portions of the stream of water to extend substantially across an
4 entire width of the receiving surface.
- 1 3. The system of claim 2, wherein a width of the first and second
2 portions of the stream of water is substantially equal to a width of
3 the media pad as defined by the distance between the pair of sides
4 of the media pad.
- 1 4. The system of claim 3, wherein the nozzle directs the stream of
2 water toward the receiving surface at a non-vertical angle.
- 1 5. The system of claim 4, wherein a volume of the first portion of the
2 stream of water is not equal to a volume of the second portion of
3 the stream of water.
- 1 6. The system of claim 5, further including a support plate comprising
2 a first member extending from an end of the distributor closer to

3 the air outlet side and extending downward and toward the air inlet
4 side.

1 7. The system of claim 6, wherein the nozzle is supported by the
2 support plate.

1 8. The system of claim 6, further including a second member
2 extending downward from the distributor distal the support plate
3 directing the second portion of the stream of water toward the
4 media pad, wherein the second portion of the stream of water is
5 directed closer to the air inlet side than the first portion of the
6 stream of water.

1 9. The system of claim 8, further including a third member directing a
2 portion of the second portion of the stream of water toward the
3 media pad in a location different than the second member.

1 10. The system of claim 9 wherein the first member and second
2 member each includes a plurality of channels extending
3 substantially between the inlet and outlet sides of the media.

1 11. A water distribution system for wetting an evaporative media pad
2 having an air inlet side, an opposing air outlet side, a pair of sides
3 extending between the air inlet side and air outlet side, and a top,
4 the system comprising:
5 a nozzle configured to spray a stream of water against a
6 water distributor having a plurality of fingers to direct the stream of water
7 therealong;
8 the fingers including a first set of fingers directing a portion
9 of the stream of water in a first direction toward a first location on the
10 top of the media pad and a second set of fingers directing a second

11 portion of the stream of water toward a second location on the top of the
12 media pad.

1 12. The system of claim 11, further including a third set of fingers to
2 direct a third portion of water to a third location on the top of the
3 media pad.

1 13. The system of claim 12, wherein the water distributor includes a
2 substantially horizontal receiving surface located above the nozzle
3 being configured to split the stream of water and direct the two
4 different streams of water in opposite directions.

1 14. The system of claim 13, wherein the receiving surface has a first
2 end and an opposing second end, and the first set of fingers extend
3 proximate the first end of the receiving surface and directed
4 downward and toward the second end of the receiving surface.

1 15. The system of claim 14, wherein the second set of fingers extend
2 from the receiving surface proximate the second end of the
3 receiving surface and directed downward toward the top of the
4 media pad.

1 16. The system of claim 15, wherein the second set of fingers
2 alternatively extend downward in two different directions thereby
3 diverting the second portion of the stream of water to two different
4 locations on the top of the media pad.

1 17. The system of claim 16, wherein the nozzle sprays the stream of
2 water toward the receiving surface upwardly at a non-vertical
3 angle.

1 18. The system of claim 17, wherein the non-vertical angle is between
2 forty and sixty degrees relative to the receiving surface.

1 19. A water distribution system for wetting an evaporative media pad
2 in an evaporative cooler comprising:
3 a nozzle configured to spray a stream of water against a
4 water distributor having a plurality of fingers to direct the stream of water
5 therealong, the plurality of fingers being separated by a channel or a slit
6 and directed downwardly, the plurality of fingers including at least two
7 fingers directing a portion of the stream of water to at least two different
8 locations respectively.

1 20. The system of claim 19, wherein there the nozzle sprays more than
2 one stream of water.